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| APPLICATION NO.           | FIL      | ING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |
|---------------------------|----------|------------|----------------------|-------------------------|-----------------|
| 10/725,132                | 12       | 2/01/2003  | Katsuhiro Onishi     | 36856.1171              | 2634            |
| 7                         | 590      | 08/09/2005 |                      | EXAMINER                |                 |
| Keating & Be<br>Suite 312 | nnett LI | LP .       |                      | TRAN                    | , LEN           |
| 10400 Eaton Pl            | lace     |            | •                    | ART UNIT                | PAPER NUMBER    |
| Fairfax, VA 2             | 22030    |            |                      | 1725                    |                 |
|                           |          | •          | •                    | DATE MAILED: 08/09/2005 |                 |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   |   |   | 3 |  |  |  |  |
|---|---|---|---|---|--|--|--|--|
| Office Action Summary   |   | Application No.   | Applicant(s)  |   |  |  |  |  |
|   |   | 10/725,132  | ONISHI, KATSUHIRO   |   |  |  |  |  |
|   | Office Action Summary   | Examiner  | Art Unit  |   |  |  |  |  |
|   |   | Len Tran  | 1725  |   |  |  |  |  |
| Period fo   | The MAILING DATE of this communication apports. The ply   | pears on the cover sheet with the c   | orrespondence address   |   |  |  |  |  |
| THE   - External after   - If the   - If NO   - Failu   Any I | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication: period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tir<br>ly within the statutory minimum of thirty (30) day<br>will apply and will expire SIX (6) MONTHS from<br>e, cause the application to become ABANDONE | nely filed  rs will be considered timely.  the mailing date of this communication.  ED (35 U.S.C. § 133). | • |  |  |  |  |
| Status  |   |   |   |   |  |  |  |  |
| 1)⊠   | Responsive to communication(s) filed on 10 J  | <u>une 2005</u> .   |   |   |  |  |  |  |
| 2a) <u></u> ☐   | This action is <b>FINAL</b> . 2b)⊠ This   | s action is non-final.  |   |   |  |  |  |  |
| 3)□   | Since this application is in condition for allowa   | ince except for formal matters, pro   | secution as to the merits is  |   |  |  |  |  |
|   | closed in accordance with the practice under the  | Ex parte Quayle, 1935 C.D. 11, 4  | 53 O.G. 213.  |   |  |  |  |  |
| Dispositi   | on of Claims  |   |   |   |  |  |  |  |
| 5)□<br>6)⊠<br>7)⊠   | Claim(s) <u>1-13</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed.  Claim(s) <u>1,2,4-7 and 9-13</u> is/are rejected.  Claim(s) <u>3 and 8</u> is/are objected to.  Claim(s) are subject to restriction and/o   | wn from consideration.  |   |   |  |  |  |  |
| Applicati   | on Papers   |   |   |   |  |  |  |  |
| 9)[   | The specification is objected to by the Examine   | er.   |   |   |  |  |  |  |
| 10) 🗌   | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |   |   |   |  |  |  |  |
|   | Applicant may not request that any objection to the   | drawing(s) be held in abeyance. See   | e 37 CFR 1.85(a).   |   |  |  |  |  |
|   | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |   |   |  |  |  |  |
| 11)   | The oath or declaration is objected to by the Ex  | xaminer. Note the attached Office   | Action or form PTO-152.   |   |  |  |  |  |
| Priority u  | ınder 35 U.S.C. § 119   |   |   |   |  |  |  |  |
| a)[   | Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureasee the attached detailed Office action for a list   | ts have been received.<br>ts have been received in Applicati<br>crity documents have been receive<br>u (PCT Rule 17.2(a)).  | on No<br>ed in this National Stage  |   |  |  |  |  |
|   |   |   |   |   |  |  |  |  |
| Attachment  | t(s) e of References Cited (PTO-892)  | 4) 🗖 Inha-tau 0   | (DTO 412)   |   |  |  |  |  |
|   | e of Draftsperson's Patent Drawing Review (PTO-948)   | 4) 🔲 Interview Summary<br>Paper No(s)/Mail Da   | ate   |   |  |  |  |  |
|   | nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date  | 5) Notice of Informal F<br>6) Other:  | atent Application (PTO-152)   |   |  |  |  |  |

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-2, 4-7, and 9-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's prior art (figures 7 and 8) and further in view of Helms et al (US 3,462,577).

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Applicant's prior art discloses a resistance welding method for bonding a lead wire to a metal member comprising the steps of pressing a lead wire which is clamped by a first welding electrode and one second electrode (figures).

Applicant's prior art fails to teach a plurality of second electrodes, passing currents through the second welding electrodes, measuring and determining the currents, and current sensors.

However, Helms et al disclose the method of using two electrodes on both side of the middle electrodes, with detectors to measure and determine the currents, for the purpose of concentrating the current to a specific area of the weld joint (col. 3, lines 5-15, lines 38-46, and col. 4, lines 23-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have two additional electrodes, with detectors to measure and determine the current as taught by Helms, in Applicant's prior art..

In addition, using a direct current would have been obvious to an ordinary skill in the art, since that would depend on the design expediency.

#### Allowable Subject Matter

4. Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The prior arts of record fails to teach the step of passing current through the plurality of second welding electrodes, each of the plurality of second welding electrodes are biased upward and into contact with the metal member by springs.

## Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Len Tran whose telephone number is (571) 272-1184. The examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Louis

August 6, 2005